NC 03184
OSP 8/80

NATURAL SCIENCE RESEARCH CURATOR II

This is independent and complex research and curatorial work in the development, maintenance, and taxonomic identification of a natural science systematic collection of native and representative biological species of North Carolina.
Employees conduct original natural science research by identifying specific areas of research endeavor as dictated by academic specialty, obtaining granting sources, performing literature searches, developing proposals and methodologies to be employed, specimen gathering or observation study, recording and interpreting data, altering methodological procedures, and submitting articles and scientific papers to professional journals. As senior curators, employees are responsible for the development, maintenance, and the taxonomical identification of a systematic collection of specimens. Employees provide expertise in the area of respective specialty to other sections of the museum, private industry, other State agencies, and to the general public. Employees present informational and educational lectures on natural science or museum topics, and writes scientific as well as popular articles. Work may also require the supervision of lower level research curators, technicians, and assistants in curatorial and research endeavors. Work is performed independently with administrative review from a faculty member or higher-level natural science curators.

I. DIFFICULTY OF WORK:

Variety and Scope - Work assignments are interrelated and vary from the performance of original and independent research to the curation of systematic collections. The work is limited to a designated area of expertise but encompasses the whole scientific process and problem solving associated with curatorial maintenance.

Intricacy - Work requires a vast degree of analysis and professional judgment in the planning and execution of all research endeavors. Accuracy is required in reporting research results to the scientific community, and maintaining data files on systematic collections

Subject Matter Complexity - Employees must be extremely knowledgeable in the prescribed area of natural science, as well as scientific research methods, preservation, and curatorial techniques.

Guidelines - Curatorial procedures and research methodology followed are those generally accepted by major museums and/or researchers in the natural science field. Other guides include various scientific texts, taxonomic guidelines, accepted formats for the preparation of scientific publications, State and Federal regulations pertaining to the acquisition of certain specimens, and the program objectives of the particular natural science work area.

II. RESPONSIBILITY:

Nature of Instructions - Research endeavors are independently planned and executed with little or no technical supervision. Daily curatorial aspects are handled independently, but basic divisional procedures and administrative matters are followed when applicable to work methods.

Nature of Review - Research projects are initially discussed with supervisor for administrative feasibility. Technical research is reviewed upon completion for proper scientific style, format, and professional accuracy. Curatorial work is reviewed on a spot-check basis for adherence to well-established procedures in systematic collection maintenances.

Scope of Decisions - Decisions or modification of research methodologies will affect work unit creditability and scientific community involved in similar research endeavors.

Consequence of Decisions - Errors in judgment could result in wasted time and materials, and loss of specimens. The recording or dissemination of incorrect information could result in loss of creditability of the museum and research staff in the scientific community.

III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - Daily contact with museum and university staff; frequent contact with scientific community, representatives from governmental agencies and from private industry, museum patrons, and the general public.

Nature and Purpose - Contacts are made in order to present and interpret findings; to gather and/or exchange information and facts relating to specific area of expertise; and to explain collection, research, or curatorial techniques.

IV. OTHER WORK DEMANDS:

Work Conditions - Employees work in a laboratory setting with exposure to fumes, chemicals, and biological substances and animals. Fieldwork may expose employees to adverse environmental settings and inclement weather.

Hazards - Employees may be exposed to dangerous animals.

V. RECRUITMENT STANDARDS:

Knowledges, Skills, and Abilities - Thorough knowledge of vertebrate, invertebrate zoology, biology, botany, or other natural science field, depending on area of specialization. Thorough knowledge of requirements for scientific research and publications. Thorough knowledge of the principles and practices of scientific research. Considerable knowledge of taxonomic principles; knowledge of materials and equipment used in scientific research. Thorough knowledge of the characteristics, behavior, and habitats of organisms in area of expertise. Considerable knowledge of the natural history of North Carolina. Ability to solve advanced and complex problems of taxonomic identification. Ability to handle and care for live animals. Ability to plan, design, and conduct original research in areas of natural science, and to compile and record results in accepted scientific formats. Ability to converse and present lectures on topics in areas of expertise to professionals and laymen. Ability to train and supervise other research and curatorial staff.

Minimum Education and Experience - Possession of a master's degree in biology, zoology, or a science curriculum related to area of expertise and three years of experience in specialty area; or an equivalent combination of education and experience.